

**REMARKS**

Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 1-16, 19 and 25-34 are pending in the application.

The Examiner states that the Applicant's arguments previously presented in the Amendment filed on January 10, 2003 have been fully considered, but have been rendered moot in view of the new grounds of rejection. The Applicant will now address the new grounds of rejection.

Claims 32 and 34 are rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Matern et al. (U.S. Patent No. 5,592,473). Applicant respectfully traverses the rejection.

Claim 32 is broadly directed to a voice mail service system for a private switching system comprising a means setting a subscriber's message in memory and a means determining a communication state of the subscriber in response to an incoming communication. A means transferring the incoming communication to a system matching section and means storing the subscriber's message in the system matching section. A means providing guide service to a control section and a means accessing data of the subscriber in the memory by the control section. A means providing the data and a control signal to a processor and outputting the subscriber's message.

In the Office Action, the Examiner alleges that the feature of claim 32 referring to “means determining a communication state of the subscriber in response to an incoming communication” is anticipated by Matern et al. in column 14, line 37 “hook-flashing signal.”

There is no definition or clarification of hook-flashing signal in the Matern et al. reference. The Applicant respectfully submits that this term does not anticipate the claimed features of the present invention. Therefore, the following definition of hookflash is provided from Newton’s Telecom Dictionary 19<sup>th</sup> Edition, CMP Books, page 364 (copy attached herewith) in order to clarify the distinction:

**Hookflash:** Momentarily depressing (up to eight tenths of a second) the hookswitch of a telephone instrument can initiate various services such as calling the attendant, conferencing calls, transferring calls or answering a call coming in on a line equipped with call waiting. In ISDN, a hookflash signals the System Adapter to perform an operation, such as placing a call on hold. To hookflash, simply depress and release the receiver button. By default, the Hayes ISDN System Adapter recognizes a hookflash when the receiver button is depressed less than 0.8 of a second. You can change the default.

There is no teaching or suggestion of determining the communication state of a subscriber in Matern et al. or in the above-referenced definition. Therefore, a “hook-flashing signal” does not teach or suggest the determination of the communication state of a subscriber.

Also, the Examiner alleges that “means transferring the incoming communication to a system matching section” is allegedly anticipated by Matern et al. (column 14, lines 29-44). The Applicant also respectfully submits that this is not an accurate characterization of the applied reference.

A signal is then supplied by the detector means to the control means 12. In response to the signal supplied by the detector means, the voice mail system and method previously described may be actuated in one embodiment of this method, and the incoming caller is prompted by a recorded message retrieved from the storage means 30 (or from alternative storage means, not shown) to supply a desired extension. Any conventional method may be used to accept the extension supplied by the caller (e.g., a dual-tone multi-frequency-type method and/or hook-flash signaling methods). The control means 12 then uses the extension number supplied to cause the switching means 14 to connect the incoming call to the supplied extension time slot. Of course, the caller may not be required to supply an extension number, but rather, that number may be stored in the storage means 30 and retrieved by the control means 12, or may be supplied using other means.

There is no transferring the incoming communication to a system matching section and means storing the subscriber's message in the system matching section. The digital switch of Matern et al. performs a simple switching operation where the switch connects supervisory data to a desired extension.

Further, as stated in MPEP § 2131, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F. 2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). As noted above, Matern et al. does not disclose at least a means determining a communication state of the subscriber in response to an incoming communication, nor does it disclose a means transferring the incoming communication to a system matching section and means storing the

subscriber's message in the system matching section.. Therefore, Matern et al. cannot anticipate Applicant's claimed combinations as alleged by the Examiner. For at least these reasons it is respectfully submitted that the rejection be withdrawn and that claim 32 be allowed.

Claim 34 is a dependent claim that depends on claim 32 and therefore should be at least allowable for the same reasons presented above for claim 32 as well as the additionally recited features in the claims.

Claims 1, 4-5 13, 15, 25 and 27-28 are rejected under 35 U.S.C. § 103 (a) as being allegedly unpatentable over Matern in view of Schouhamer Immink et al. (U.S Patent No. 4,593,395). Applicant respectfully traverses the rejection.

Claim 1 is broadly directed towards a voice mail service system for a private switching system, comprising a system matching circuit configured to couple to a private switching system, so as to interface all information in relation to a call and a management of the call. A voice data memory to provide a voice mail function, and to store voice guide information in an address sector of a corresponding channel after compressing the voice guide information and voice and signal processor to store voice data of the extension subscriber in the voice data memory and retrieve it so that the voice data can be transmitted. A communication controller manages a state of each channel matching with the private switching system, process channel errors, and maintain and repair the channel. A control circuit to match with the private switching system is used to control an operation for maintaining the voice mail function.

Since the Examiner has maintained Matern et al. as the primary reference applied against independent claim 1, the Applicant expressly maintains the reasons from the prior response to clearly indicate on the record that the Applicant has not conceded any of his previous positions relative the maintained rejections. For brevity, the Applicant expressly incorporates the prior arguments presented in the January 10, 2003 response, without a literal rendition of those arguments in this response.

The Office Action acknowledges that the primary reference Matern et al. is defective because there is no teaching or suggestion of a communication controller to manage a state of each channel matching with the private switching system, process channel errors, and maintain and repair the channel.

The Examiner then provides Schouhamer Immink et al. as a secondary reference to make up for the deficiencies of the applied primary reference. In Schouhamer Immink et al., an error correction method for transferring word-wise arranged data, two word correction codes are used successfully, each code acting on a group of words while an interleaving step is performed.

The Examiner asserts that Schouhamer Immink et al. teaches processing channel errors, and maintaining and repairing the channel. The embodiment discussed in Figure 3 of Schouhamer Immink et al. and specifically discussed in column 6, lines 4-30 refers to an encoder that processes channel words arriving at an input in a bit serial manner and some ways of correcting or repairing channel word errors. Hence, Schouhamer Immink et al. does not teach at least using a communication controller to manage a state of each channel matching with the

private switching system, processing channel errors, and maintaining and repairing the channel, as discussed above.

The combination of Matern et al. and Schouhamer does not render the Applicant's claimed combination obvious as alleged by the Examiner. Therefore, it is respectfully requested that the rejection be withdrawn and that claim 1 be allowed.

Claims 2-3, 12, 14 and 33 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Matern in view of Schouhamer and further in view of Hersh et al. (U.S. Patent No. 6,205,206). Applicant respectfully traverses the rejection.

Claims 2-3, 12, 14 and 33 are dependent claims that depend upon independent claim 1 and should be allowable for at least the same reasons as independent claim 1, as well as the additionally recited features in these claims.

Claims 6, 7, 9, 11, 16 and 29-30 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Matern in view of Schouhamer and further in view of LaRocca (U.S. Patent No. 6,069,888). Applicant respectfully traverses the rejection.

Claims 6, 7, 9, 11, 16 and 29-30 are dependent claims that depend upon independent claim 1 and should be allowable for at least the same reasons as independent claim 1, as well as the additionally recited features in these claims.

Claims 8, 10 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matern in view of Schouhamer in view of LaRocca. Applicant respectfully traverses the rejection.

Claims 8, 10 and 31 are dependent claims that depend upon independent claim 1 and should be allowable for at least the same reasons as independent claim 1, as well as the additionally recited features in these claims.

Claims 19 and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matern in view of Schouhamer in view of Brunson (U.S. Patent No. 5,329,579). Applicant respectfully traverses the rejection.

Claims 19 and 26 are dependent claims that depend upon independent claim 1 and should be allowable for at least the same reasons as independent claim 1, as well as the additionally recited features in these claims.

For at least the foregoing reasons and the reasons set forth in the Applicant's response of January 10, 2003, it is respectfully submitted that all of the pending claims are distinguishable over the applied art.

### **CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **JOHN L. CICCOTZI**, at the telephone number listed below.

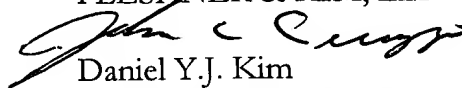
In view of the foregoing amendments and remarks, it is respectfully submitted that this application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

Serial No. 09/658,134

Docket No. HI-014

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
FLESHNER & KIM, LLP



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Enclosure:

Newton's Telecom Dictionary 19<sup>th</sup> Edition, CMP Books, page 364

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Published by CMP Books

An imprint of CMP Media LLC

Main office: CMP Books, 600 Harrison St., San Francisco, CA 94107 USA

Phone: 415-947-6615; Fax: 415-947-6015

Sales office: CMP Books, 12 West 21 Street, New York, NY 10010

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ISBN Number 1-57820-307-4

March 2003

Nineteenth Edition

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## Home Office

built-in Authentication Center (AuC), which is a database of subscriber information, including access rights and services subscribed to. A permanent SS7 database used in cellular networks, including AMPS (Advanced Mobile Phone System), GSM (Global System for Mobile Communications), and PCS. The HLR is located on the SCP (Signal Control Point) of the cellular provider of record, and is used to identify/verify a subscriber; it also contains subscriber data related to features and services. The HLR is used not only when you are making a call within the area of coverage supported by your cellular provider of record. It also is used to verify your legitimacy and to support the features to which you subscribe when you are roaming outside that home area. In a roaming scenario, the local service provider queries the HLR via a SS7 link. Once verified, your data is transferred via SS7 to the VLR (Visitor Location Register), where it is maintained during your period of roaming activity within the coverage area of that provider. HLR is a key element of IS-41, the predominant wireless standard in North America. See also AMPS, GSM, IS-41, PCS, SCP, SS7 and VLR.

**Home Office** The most common form of telecommuting, in which employees work at home one or more days per week. See also VPN.

**Home Page** The classic definition: The front page of an "online brochure" about an individual or organization. The Internet definition: The first page browsers see of the information you have posted on your computer attached to the World Wide Web is your "home page." It's a "welcome" page. It says "Welcome to my site, my home." It typically contains some sort of table of contents to more information which a visitor (browser, surfer, etc.) will find at your site by clicking onto hypertext links you've created. In a Web site, a home page is usually called index.htm, index.html or index.asp. The biggest mistake made by people creating Web sites is that they fail to call their home page index.\* (that star depends on the operating system which the Web hoster is using). See HTML, Internet, Streaming and World Wide Web.

**Home Run** Phone system wiring where the individual cables run from each phone directly back to the central switching equipment. Home run cabling can be thought of as "star" cabling. Every cable radiates out from the central equipment. All PBXs and virtually all key systems work on home run cabling. Some local area networks work on home run wiring. See Loop Through.

**Home Run Cabling** There are basically two ways you can install phone cabling in a home. The old fashioned way is to install loop wiring — one or two pairs of wiring loop through the home, from one outlet to another. With loop wiring you install single line or two line phones around the house. Typically anyone picking up the phone can answer an incoming call or can hear the conversation. The second way to install wiring to home run cabling — in which individual cables are run directly from a central location, which may be a telephone switch or a cross-connect panel. This configuration is also known as star topology. The advantage of home run or star cabling is typically you have privacy — on one can pick up the phone while you're talking and most importantly, you can have an intercom. You can dial from one phone to other.

**Home Tandem** A tandem of a higher office class to which another tandem or an end office has a final trunk group. Home tandems may exist for all or defined subsets of tandem switched traffic.

**Home Zone** Cell phone service that is configured by the cell phone carrier to offer dual pricing — one price for calling from your phone (i.e. cheap) and another, more expensive price for calling from outside your home — like a normal cell phone. At home you may plug your cell phone into a home phone system. The idea of home zone is for your cell phone company to sell more phones, by competing with landlines.

**HomePNA** Home Phoneline Networking Alliance. An association of companies working toward the adoption of a single, unified phoneline networking standard and bringing to market a range of interoperable home networking solutions using in-place phone wiring. HomePNA solutions are intended to be plug-and-play for networking of multiple PCs, peripherals (e.g., printers, scanners and video cameras), multi-player network games, home automation devices (e.g., environmental control and security systems), digital televisions and digital telephones. An all-purpose Home Area Network (HAN) using existing telephone wiring, the HomePNA solution also is intended as a means of shared access to IP voice and video networks, the IP-based Internet, and the conventional circuit-switched Wide Area Network (WAN). Network access technologies are intended to include analog, ISDN and xDSL local loops. Initial efforts are directed at a technology that will support spatial separation of nodes by as much as 500 feet, which represents a home of up to 10,000 square feet (which is bigger than my home, and probably bigger than yours, unless you are Bill Gates and live in a monstrosity of a castle, in which case you probably already have an ATM-based LAN with SONET fiber optics pipes running at 10 Gbps, but I digress), and run-

ning at data rates of 1 Mbps. Frequency Division Multiplexing (FDM) is intended to support simultaneous voice and data traffic; frequency ranges are intended to avoid interference from devices (e.g., refrigerators and air conditioners) found in the home. HomePNA solutions are based on an Ethernet derivative, running at 1 Mbps at frequencies above 2 MHz using a proprietary compression technique from Tut Systems, and using the CSMA/CD protocol native to Ethernet; speeds of 10 Mbps are planned into the future, with the theoretical potential being as much as 100 Mbps. Members include 2Com, AT&T, Compaq, Hewlett-Packard, IBM, Intel, Lucent and Tut Systems. www.homepna.org. See also Ethernet, FDM, ISDN, SONET and xDSL.

**Homeostasis** A physiological constancy or equilibrium maintained by self-regulating mechanisms. In short, the state of a system in which the input and output are exactly balanced, so there is no change.

**Homes Passed** An expressed of the number of dwellings that a CATV provider's distribution facilities pass by in a given cable service area and an expression of the market potential of the area.

**Homing** 1. When you dial a long distance number, your central office will choose a special set of trunks to send your call onto the next switching center for movement through the nationwide toll system. Those trunks are said to be the homing trunks for your central office. In other words, your central office is said to home on these trunks. If you're consistently encountering lousy long distance lines (and so are others on your central office), then ask your telephone company to check these trunks out.

2. Returning to the starting position, as in a rotary stepping switch when its connection is released.

**Homo** 1. The Greek prefix meaning the same.

2. Home Office Mobile Office. See also SOHO, which stands for Small Office Home Office.

**Homogeneous Networks** Composed of similar hardware from the same manufacturer.

**Homologation** Conformity of a product or specification to international telephony connection standards. What this means in simple language is that you have submitted your product to a regulatory agency or a government testing agency in a foreign country and they have said that your product is OK for use and sale in that country and is allowed to be connected to the local phone system. In short, your product has now been homologated in that country.

**Honey Pot** A honey pot is a decoy server attached to the Internet designed to attract hackers' attention. The honey pot gives the owner of a targeted server the chance to analyze the attack, develop a strategy to thwart the attack and to block access without causing any damage to the main server.

**HoneyDoThis List** Gerry Friesen's wife Paula created this term. It derives from her frequent requests to Gerry, "Honey Do This." "Honey Do That."

**Honeycomb Coil** A type of inductance in which the turns do not lie adjacent to each other.

**Honeymoon** It was the accepted practice in Babylon 4,000 years ago that for a month after the wedding, the bride's father would supply his son-in-law with all the mead he could drink. Mead is a honey beer, and because their calendar was lunar based, this period was called the "honey month" or what we know today as the honeymoon.

**Hook-up Wire** A wire used for low current, low voltage (under 1000 volts) applications within enclosed electronic equipment.

**Hookware** Free software that contains a limited number of features designed to entice the user into purchasing the more comprehensive version. See also Hyperware, Meadware, Shovelware, Slideware and Vaporware.

**Hooker** The term "hooker," meaning a prostitute, honors U.S. Army General Joseph Hooker, whose penchant for war was matched only by his predilection for paid female companionship. In New Orleans during the Civil War, Hooker spent so much time frolicking with ladies of the evening that the women came to be called "Hooker's Division." Eventually, these specialized "troops" became known simply as "hookers."

**Hookflash** Momentarily depressing (up to eight tenths of a second) the hookswitch of a telephone instrument can initiate various services such as calling the attendant, transferring calls, transferring calls or answering a call coming in on a line equipped with call waiting. In ISDN, a hookflash signals the System Adapter to perform an operation, such as placing a call on hold. To hookflash, simply depress and release the receiver button. By default, the Hayes ISDN System Adapter recognizes a hookflash when the receiver button is depressed less than 0.8 of a second. You can change the default. See Hookswitch.

**Hooking Signal** An

for a subscriber intends to

**Hookswitch** Also call

instrument where you lay y

connected to the "hook" o

phone was not in use. The

phones which is pushed do

the handset is raised, the

depressing the hookswitch

ing the attendant, conferen

**Hookswitch Diali**

carefully. If you push it five

phones discourage hookswi

**Hook'n'Holler** Hook

open 24-hours a day, sever

ten and talk to whoever's c

to get someone to speak to

grant is also called a Jun

Snowk Box System, FP o

can consisting of 4 wires (

is how it works: Audio ene

the receive pair of all the o

will not return on the recei

conferencing oriented party

hook and holler circuit exce

the distant out points. A

individual four wire "dro

"bridges" can be analog

minus yourself). They prov

**Hop** 1. Each short, indiv

over, from router to router

2. A change of Radio l

Data (CDPD) data for a ch

**Hop by Hop Rou**

use its own routing knowl

tion that all switches will

destination. PNNI (Private

**Hop Channel** A Ra

for carrying a Cellular Digi

**Hop Count** The num

destination. In short, the r

a destination. In TCP/IP r

header and packets are di

**Hop Off** When you r

attached to the Internet tr

phone attached to the Int

switching cards and whic

Internet is called "Hop Of

**Hop Sequence** Th

receivers hop from on fr

Hopping Spread Spectrum

PCS (Personal Commun

**Hops** Term describing

**HOPS** Hardware Order

**Horizontal** 1. H. It

is controlled by a horizo

2. Descriptive of the

nd blocks are mounted

opposed to the "vertical

some locations, frames

Distributing Frame, or HI

**Horizontal Bea**

**Horizontal Blan**